

Clear and  
straw-colored

### Transudate

- Ratio of pleural fluid to serum protein is **less than or equal to 0.5**
- Ratio of pleural fluid to serum LDH is **less than or equal to 0.6**

Look for heart failure,  
renal disease, or cirrhosis



Turbid, more yellow,  
and may have foam

### Exudate

- Ratio of pleural fluid to serum protein is **greater than 0.5**
- Ratio of pleural fluid to serum LDH is **greater than 0.6**

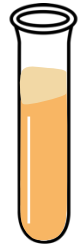
Further diagnostic procedures



Turbid and red  
(lysed RBCs)

Trauma, malignancy

Further diagnostic procedures



Purulent

Infection

Further diagnostic procedures